

REMARKS

By the above action, claim 1 has been further amended and claim 2 has been cancelled. In view of the action taken and the following remarks, further consideration of this application is now requested.

Before proceeding further, the undersigned wishes to thank the Examiner for her courteous and open-minded consideration of the points presented at the personal interview conducted on October 12, 2006. The substance of the discussions is set forth below in connection with applicants' response to the Examiner's rejections.

All of claims 1-6 were rejected under 35 U.S.C. § 112 as being indefinite due to use of the terminology "temperature producing spontaneous fuel vaporization" because no disclosure exists as to what that temperature might be. However, at the interview, it was pointed out that there is no single temperature that would meet the quoted terminology, but that one skilled in the art would easily be able to determine such. That is, various fuels could be used in such a heater, e.g., diesel fuel, kerosene, gasoline, etc., each of which has a different but known vaporization temperature at a given pressure. Thus, knowing the fuel being used, the fuel supply pressure and nozzle-produced pressure drop, those of ordinary skill in the art would know how much heat would have to be produced by the heater to insure that the fuel spontaneously vaporizes as it exits the nozzle, so that the fuel is a liquid in the supply line yet enters the mixture formation area as a vapor and not a liquid spray or mist. As reflected in the Interview Summary, the Examiner indicated that the above points would likely be sufficient to overcome this rejection, and thus, withdrawal of the § 112 rejection is requested.

All of the claims were also rejected under 35 U.S.C. § 103 as being obvious over the combined teachings of the International application of Köhne in view of the German application of Evers.

As recognized by the Examiner in the rejection, the device of the Köhne et al. patent lacks a pulse fuel supply as is present in the claimed invention. For this reason, fuel supply of the Evers et al. heater was relied upon. However, at the interview, it was pointed out to the Examiner that the Evers et al. system is more complex than that of the present invention in that it requires a low pressure accumulator 7, a high pressure accumulator 12 with a non-return valve 11 being located between them on the pressure side of a stop valve 8 (which

is the counterpart to the changeover valve of the present application) instead of a holding valve on the low pressure side of the changeover valve. That is, because the stop valve 8 merely switches the flow from pump 6 between the fuel supply line 11 and the fuel return line 9, the accumulators insure that no delay occurs in the commence of the fuel spray when the valve 8 switches from connecting line 5 to line 9 to connecting line 5 with line 11. The nonreturn valve 11 merely prevents back flow and does not affect flow from the pump and the stop valve merely opens and closes the flow line 9 to the fuel reservoir and has no ability to set system pressure because it is not pressure responsive.

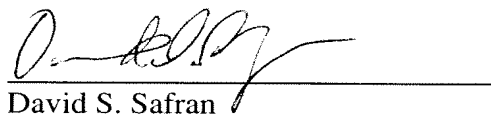
In contrast, as defined in amended claim 1, the present invention has a pressure holding valve in the fuel return line and the pump has a pumping pressure that is matched to the holding pressure of the pressure holding valve. No accumulators are used or needed since the system pressure remains the same regardless of whether the changeover valve is open or closed, the pump pressure being matched to the holding pressure.

Based on the foregoing, the Examiner indicated that she would consider these points in reevaluating her rejection, and if her further review of the prior art, confirmed this assessment that the outstanding rejection would be withdrawn.

In view of the foregoing, reconsideration and withdrawal of the outstanding rejection under § 103 is hereby requested.

While this application should now be in condition for allowance, in the event that any issues should remain after consideration of this response which could be addressed through discussions with the undersigned, then the Examiner is requested to contact the undersigned by telephone for that purpose.

Respectfully submitted,



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